

**Permit No. DC0021199**

Effective Date: *September 30, 2010*  
Expiration Date: *September 30, 2015*

**AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT  
DISCHARGE ELIMINATION SYSTEM**

In compliance with the provisions of the Clean Water Act, as amended, 33 U.S.C. # 1251 et seq.  
(the "Act"),

**District of Columbia Water and Sewer Authority**

is authorized to discharge from the wastewater system and the facility located at

5000 Overlook Avenue, SW  
Washington, D.C. 20032

to receiving waters named Potomac and Anacostia Rivers, Rock Creek, and tributary waters in  
accordance with effluent limitations, monitoring requirements and other conditions set forth in  
parts I, II and III, herein.

Signed this *31<sup>st</sup>* day of *August, 2010*



Jon M. Capacasa, Director  
Water Protection Division  
U.S. Environmental Protection Agency  
Region III



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## **Part I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

### **SECTION A. DEFINITIONS**

When used in this permit, unless otherwise indicated, the following terms shall mean the following:

1. **"Blue Plains" or "plant" or "POTW" or "facility"** means the District of Columbia advanced wastewater treatment plant located at 5000 Overlook Avenue, S.W., Washington, DC, 20032.
2. **"Blue Plains Tunnel" or "BPT"** means the tunnel that is part of the CSS which is included in the LTCP and which terminates on the Blue Plains site.
3. **"Combined Sewer System" or "CSS"** means the pipelines pumping stations, treatment facilities, and appurtenances in the District of Columbia which are designed to convey wastewater and storm water through a single pipe system to combined sewer overflow outfalls and/or the POTW. The system also includes the selected CSO controls included in the LTCP and all supplements thereto, which are being implemented under the Consent Decree in Consolidated Civil Action No. 1:00CV00183TFH and all amendments thereto.
4. **"Combined Sewer System Flow" or "CSSF"** means the conditions that begin when the Influent Flow rate to receive complete treatment at the POTW is greater than 511 mgd. CSSF conditions shall be deemed to cease 4 hours after the Influent Flow rate drops to a rate less than 511 mgd or a period of 4 hours has lapsed since the start of the CSSF conditions, whichever occurs later.
5. **"Complete Treatment"** means passage of all flows through any combination of conveyance and treatment downstream of primary sedimentation that ultimately discharges effluent from Outfall 002, in accordance with the limitations set forth for Outfall 002 found at Part I.B. of this permit.
6. **"Disinfection"** means treatment to reduce E. coli. Disinfection by chlorination shall be followed by dechlorination.
7. **"Dry Weather Flow" or "DWF"** means the flow from sewers that convey collection system flow to Blue Plains when such flow is not greater than a rate of 511 mgd.
8. **"Enhanced Clarification"** means the treatment process that provides improved performance over that typically obtained from plain sedimentation, which process includes the recirculation of solids removed from the process or recirculation of other media together with the addition of coagulants.
9. **"Enhanced Clarification Facility" or "ECF"** means the combination of process units located on the end of the BPT, designed to empty the BPT and distribute flow from

the BPT to Complete Treatment and to disinfection prior to discharge from Outfall 001; such distribution to be under an operating routine described at Part I.C. footnote (1). These facilities are being constructed under the LTCP.

10. **“Excess Flow Treatment” or “EFT”** means treatment of Influent Flow during CSSF conditions, in East Primary Sedimentation followed by disinfection and dechlorination, for flow rates that exceed the rates required to receive Complete Treatment, up to a maximum rate of 336 mgd. As part of placing the ECF in operation, the EFT facilities shall be permanently disconnected from Outfall 001.
11. **“Influent Flow”** means the following:
  - a. **Influent Flow** to receive complete treatment means the sum of metered flows from sewers that convey collection system flow to Blue Plains and flow emptied from the BPT.
  - b. Prior to placing the ECF in operation, the **Influent Flow** discharged from Outfall 001 means the component of metered flow from sewers that convey collection system flow to Blue Plains and receives EFT.
  - c. After the ECF is placed in operation, the **Influent Flow** discharged from Outfall 001 means the component of flow emptied from the BPT that receives treatment in the ECF and disinfection and dechlorination.
12. **“Long Term Control Plan” or “LTCP”** means the recommended plan for the CSS included in the Combined Sewer System Long Term Control Plan, Final Report, July 2002 prepared by the permittee pursuant to the 1994 CSO Policy and Section 402(q) of the CWA and any supplements thereto. The LTCP Final Report, July 2002, was submitted to EPA and the DC Department of Health, later DC Department of the Environment.
13. **“Measured Flow Rates”** means flows measured to determine rates to be treated and discharged under CSSF conditions. Flow rates shall be metered and rates recorded at intervals not to exceed one (1) hour. An average rate shall be calculated from the metered rate. An average rate means the rate calculated, for the total time that CSSF conditions are in effect, by dividing the sum of the metered rates by the number of rates recorded. Average rates shall be calculated or recorded directly from metered rates. The permittee shall be in compliance with the treatment and discharge requirements for CSSF conditions when average rates are within the following:
  - a. Not less than 0.90 times the rate required to receive Complete Treatment;
  - b. Not greater than 1.1 times the maximum rate permitted to be discharged from Outfall 001.

14. **“Place in Operation”** means to achieve steady state operation and to operate consistently in such a way as to accomplish the intended function, even though all construction close-out activities (such as completion of a punch list and resolution of contract disputes or close-outs) may not yet be complete.
15. **“Wet Weather Event”** means the condition that occurs as a result of storm water runoff, including snowmelt, entering or being conveyed in the CSS.
16. **“Grab Sample”** - An individual sample collected in less than 15 minutes.
17. **“At Outfall XXX”** - A sample location before the effluent joins or is diluted by any other waste stream, body of water, or substance or as otherwise specified.
18. **“Estimate”** - To be based on a technical evaluation of the sources contributing to the discharge including, but not limited to pump capabilities, water meters and batch discharge volumes.
19. **“i-s”** (immersion stabilization) - A calibrated device is immersed in the effluent stream until the reading is stabilized.



## **SECTION B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS OUTFALL 002**

Effluent limitations are based upon the design capacity of 370 mgd for Complete Treatment. During the period beginning on the effective date of the permit and lasting through the expiration date, the permittee is authorized to discharge from Outfall 002 to the Potomac River, subject to the following conditions, discharge limitations and monitoring requirements:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	(lb/day)		Other Units (specify)		Measurement Frequency	Sample Type
	Ave. Monthly	Ave. Weekly	Ave. Monthly	Ave. Weekly		
<b>Flow/day (mgd) (1, 1a, )</b>	N/A (2)	N/A	N/L (3)	N/L	Continuous	Measured
<b>Carbonaceous Biological Oxygen Demand (5 day)</b>	15,429	23,143	5.0 mg/l	7.5 mg/l	Daily	24-hour Composite
<b>Total Suspended Solids (TSS)</b>	21,600	32,400	7.0 mg/l	10.5 mg/l	Daily	24-hour composite
<b>Total Phosphorus</b>	555 (4)	1,080	0.18 mg/l (4)	0.35 mg/l	Daily	24-hour composite
<b>Ammonia Nitrogen:</b>						
Summer (5/1 – 10/31)	12,960	18,823	4.2 mg/l	6.1 mg/l	Daily	24-hour composite
Winter 1 (11/1 – 2/14)	34,253	45,670	11.1 mg/l	14.8 mg/l	Daily	24-hour composite
Winter 2 (2/15 – 4/30)	39,500	52,460	12.8 mg/	17.0 mg/l	Daily	24-hour composite
<b>Dissolved Oxygen</b>	5.0 mg/l minimum daily average. Not less than 4.0 mg/l at any time				Every 2 hours	
<b>Total Residual Chlorine (mg/l) (6)</b>	Non-detectable		Non-detectable		Every 2 hours	Grab
<b>pH (s.u.) (7)</b>	Within limits of 6.0 to 8.5 standard units				Continuous in-situ monitoring and recording	
<b>Total Ortho-phosphate (mg/l)</b>	N/A	N/A	N/L	N/L	Daily	24-hour composite
<b>Alkalinity, total (CaCO<sub>3</sub>) (mg/l)</b>	N/A	N/A	N/L	N/L	Daily	24-hour composite
<b>Hardness, total (CaCO<sub>3</sub>) (mg/l)</b>	N/A	N/A	N/L	N/L	Daily	24-hour composite
<b>Nitrite (NO<sub>2</sub>) (mg/l)</b>	N/A	N/A	N/L	N/L	Daily	24-hour composite

Nitrate (NO <sub>3</sub> ) Total Kjeldahl	N/A	N/A	N/L	N/L	Daily	24-hour composite
Nitrogen (mg/l) (10)	N/A	N/A	N/L	N/L	Daily	24-hour composite
Total Nitrogen (mg/l) (10)					Daily	24-hour composite
Cadmium (dissolved) (9)	N/A	N/A	N/L	N/L	Bimonthly	4 grabs/24 hours
Copper (dissolved) (9)	N/A	N/A	N/L	N/L	Bimonthly	4 grabs/24 hours
Iron (dissolved) (9)	N/A	N/A	N/L	N/L	Bimonthly	4 grabs/24 hours
Mercury (total recoverable) (8)	N/A	N/A	N/L	N/L	Bimonthly	4 grabs/24 hours
Lead (dissolved) (9)	N/A	N/A	N/L	N/L	Bimonthly	4 grabs/24 hours
Nickel (dissolved) (9)	N/A	N/A	N/L	N/L	Bimonthly	4 grabs/24 hours
Zinc (dissolved) (9)	N/A	N/A	N/L	N/L	Bimonthly	4 grabs/24 hours
PCBs (12)	N/A	N/A			2 wet and 2 dry weather samples quarterly	24-hour composite
E. coli (maximum 30-day geometric mean for 5 samples minimum)	N/A	N/A	126 cfu/100 ml Geometric mean	N/L	1 /day	Grab

(1) Conditions and limitations for flows discharged from Outfall 002 shall be as follows:

Flow Condition and Period	Times	Measured Influent Flow Rates to Receive Complete Treatment
<b>A. DWF, through permit expiration date</b>	<b>All times</b>	<b>Up to and including 511 mgd</b>
<b>B. CSSF</b>		
1. From effective date of permit and following placing ECF in operation unless otherwise authorized or approved by EPA	First 4 hours After 4 hours	Up to and including 555 mgd Up to and including 511 mgd
2. Until Completion of Nitrification Denitrification Facilities upgrade, but no later than March 1, 2011	First 4 hours After 4 hours	Up to and including 511 mgd Up to and including 450 mgd
3. During construction of improvements to existing nitrogen removal facilities, period(s) to be determined by permittee and EPA from completion of design and construction schedules for the length of time required for such construction, but no later than July 14, 2014.	First 4 hours After 4 hours	Up to and including 511 mgd Up to and including 450 mgd
4. During construction of the ECF and tie-ins to the existing facilities. Periods to be determined by permittee and EPA from completion of design and construction schedules.	First 4 hours After 4 hours	Up to and including 511 mgd Up to and including 450 mgd

- (1a) Flows reported for locations required under this permit are based on flows metered by the Blue Plains metering system. This system produces information to report flows by direct metering or through calculations using the results from multiple meters.
- (2) N/A Not Applicable
- (3) N/L No Limit, monitoring only
- (4) The phosphorus limitation of 0.18 mg/l is based on the Potomac Strategy Management Commission Agreement and the best technical information available at the time of permit issuance. In addition, based upon available data of full plant BNR process operation, the monthly average is expressed as a 12 month rolling average. In any 12 month period no one month may exceed a mass of 1080 lbs/day and 0.35 mg/l. During full plant BNR, the 12 month rolling average mass for a month shall be the total mass for the month plus the total mass for the previous eleven (11) months divided by the total number of days in the 12 month period. The 12 month rolling average concentration for a month shall be the total mass for the 12 month period divided by the average daily flow (in mgd) for the 12 month period times 8.34. No single month in any 12 month period used to calculate a 12 month rolling average shall exceed a monthly average limit of 490 kg/day (1080 lb/day) and 0.35 mg/l.
- (5) Continuous in situ monitoring and recording of dissolved oxygen shall continue. The monitoring requirements shall be understood to require twelve (12) readings from the continuous recording per day.
- (6) When the total residual chlorine (TRC) analysis of the final effluent at Outfall 002 results in a detectable measurement, the permittee shall take steps to achieve a non-detectable TRC concentration. See Special Condition Part IV Section C.
- (7) The permittee is required to be in compliance with the pH limitations specified above for 99% of the time for any calendar month. The total excursion time allowed for any calendar month is 7 hours, 26 minutes and no individual excursion shall exceed 60 minutes.
- (8) The permittee shall sample the effluent for mercury using the most sensitive test Method 1631 E. The method detection limit, and the method used to perform the mercury analysis shall be submitted with the discharge monitoring reports.
- (9) The permittee shall monitor the effluent at Outfall 002 for the metals listed above in accordance with the conditions set forth below. Report results in micrograms per liter.
- a. The permittee shall test for additional metals, and priority pollutants (Appendix A to 40 C.F.R. Part 423) twice in five (5) years during the term of this permit. One such testing shall be in the third year of the permit and the second shall be in the last year of the permit.

- b. All analytical methods will be EPA approved methodologies found in 40 C.F.R. Part 136.
  - c. The quantification level (QL) shall be the lowest concentration used for the calibration of a measurement system when the calibration is in accordance with the procedures published for the required method. Usually, units for the QL are in micrograms per liter.
  - d. Permittee shall analyze each grab sample and report the average of the four samples. Alternatively, the permittee may prepare a composite of the grab samples in the laboratory by proportioning to flow and analyze the laboratory composite sample.
- (10) As provided in Part IV Section D of this permit, the permittee shall operate the plant, including the nitrogen removal process to meet the total nitrogen effluent limit of not more than 4,377,580 pounds per year which is assigned to Outfall 002.
- Total nitrogen concentration shall be the sum of organic nitrogen, ammonia nitrogen and (NO<sub>2</sub> + NO<sub>3</sub>) - N concentrations (e.g., Total Nitrogen = Total Kjeldahl nitrogen + No<sub>2</sub> as N + No<sub>3</sub> as N).
- The total nitrogen effluent for Outfall 002 shall be calculated on a daily basis as the mass load in pounds per day derived from the daily total nitrogen concentration from Outfall 002, times the associated daily flow. The daily total nitrogen mass load shall be summed during each calendar year to determine the annual mass load.
- (11) The Permittee shall report any substantial changes in the volume or character of pollutants being introduced into the POTW.
- (12) See Part IV.F, Special Conditions for additional PCB monitoring requirements.

## PART I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

### SECTION C. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS OUTFALL 001

Discharge from Outfall 001 to the Potomac River is approved as an anticipated bypass, provided the permittee is in compliance with the LTCP implementation schedule requirements of the March 23, 2005 Consent Decree entered into in United States v. DCWASA, et al, Consolidated Civil Action No. 1:CV00183TFH and any supplements or modifications thereto and subject to the following conditions, discharge limitations and monitoring requirements. Beginning from the effective date of this permit and lasting through the expiration date, Influent Flow discharged from Outfall 001 shall receive treatment as follows:

- a. Excess Flow Treatment (EFT) until the ECF is placed in operation.
- b. After the ECF is placed in operation, Influent Flow shall receive treatment in the ECF followed by disinfection and dechlorination.

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	Kg/day (lb/day)		Other Units (specify)		Measurement Frequency	Sample Type (6)
	Ave Monthly	Ave Weekly	Ave Monthly	Ave Weekly		
<b>Flow/discharge (mgd) (1) (1a)</b>	N/A	N/A (2)	N/L (3)	N/L	Continuous	Measured
<b>Carbonaceous Biochemical Oxygen Demand (5-day)</b>	N/A	N/A	N/L	N/L	Per discharge	Composite (4)
<b>Total Suspended Solids (TSS)</b>	N/A	N/A	N/L	N/L	Per discharge	Composite (4)
<b>pH (s.u.)</b>	N/A	N/A	N/L	N/L	Per discharge	Composite (4)
<b>PCBs (9)</b>					2 wet weather per quarter	Grab
<b>E.coli – (cfu/100 ml)</b>	N/A	N/A	N/L	N/L	Every 8 hours, not less than one sample per discharge	Grab
<b>Total Residual Chlorine (mg/l) (5)</b>	Non-detectable		Non-detectable		Every 2 hours, not less than one sample per discharge	Grab
<b>Total Nitrogen (10)</b>	N/A	N/A	N/L	N/L	Per discharge	Composite (4)
<b>Total Phosphorus</b>	N/A	N/A	N/L	N/L	Per discharge	Composite (4)

(1) Conditions and limitations for Influent Flow discharged from Outfall 001 shall be as follows:

FLOW CONDITION AND PERIOD	TIMES	MEASURED FLOW RATES FOR OUFALL 001
A. DWF	All times	No discharge permitted
<p>B. CSSF</p> <p>1. From effective date of permit and lasting until ECF is placed in operation.</p> <p>2. Following ECF being placed in operation, for emptying the BPT under an operating routine that provides for:</p> <p>a. Conveying flow from the BPT through the ECF or transfer to complete treatment;</p> <p>b. Regulating the discharge of ECF effluent to maintain a rate of 511 mgd through complete treatment while optimizing conditions for maintaining the availability of the storage volume in the BPT such as that the occurrence of CSOs is minimized;</p> <p>c. No discharge of flow from the BPT from Outfall 001 when DWF conditions exist; and</p> <p>d. Limiting discharge of ECF effluent from Outfall001 to a maximum rate of 225 mgd; provided that any discharge of ECF effluent from Outfall 001 shall not occur except for the purpose of maintaining the availability of storage volume in the BPT to the extent that the occurrence of CSOs is minimized.</p>	<p>All times</p> <p>All times</p>	<p>Up to and including 336 mgd above rates to receive complete treatment under Part I.B for Outfall 002</p> <p>Up to a maximum of 225 mgd</p>

- (1a) Flows reported for locations required under this permit are based on flows metered by the Blue Plains metering system. This system produces information to report flows by direct metering or through calculations using the results from multiple meters.
- (2) N/A means not applicable.
- (3) N/L means no Limit, monitoring only.
- (4) Collect one grab sample every two (2) hours and flow composite samples during each calendar day discharge. Analyze and obtain the concentration of the composited sample obtained each calendar day. Determine the mass load discharged for each day using the daily

concentration and the average flow rate recorded for that calendar day. Sum the daily mass loads obtained each calendar year to obtain the total mass load discharged in the calendar year.

- (5) See Part IV, Section C for additional Chlorination/Dechlorination monitoring requirements.
- (6) All pollutant sampling shall commence no later than two (2) hours after a discharge has begun to occur at Outfall 001. Samples are not required for discharges lasting less than two (2) hours. The two hour delay does not apply to flow monitoring.
- (7) Authorization of CSO-related bypasses under this provision may be modified or terminated when there is a substantial increase in the volume or character of pollutants being introduced into the POTW.
- (8) Permittee shall provide notice to the permitting authority of the discharges for Outfall 001 within 24 hours of the commencement of the discharge.
- (9) See Part IV, Section F for additional PCB monitoring and reduction requirements.
- (10) After the ECF is placed in operation, the permittee shall evaluate performance in accordance with Part III.D.4.a. through e. The performance assessment for Outfall 001 shall be submitted with each application for permit reissuance.

## **SECTION D. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS OUTFALL 019<sup>(1)</sup>**

Outfall 019 is the discharge from the Northeast Boundary Swirl Concentrator Facility to the Anacostia River. Treatment includes: screening, swirl concentration, chlorination and dechlorination. These effluent limitations and monitoring requirements become effective from issuance date through the expiration date of this permit. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Kg/day (lb/day)		Discharge Limitations		Monitoring Requirements	
	Ave Monthly	Ave Weekly	Other (specify)		Measurement Frequency	Sample Type (6)
Flow/day (mgd)	N/A (2)	N/A	N/L (3)	N/L	Continuous	Measured
Total Suspended Solids (mg/l)	N/A	N/A	N/L	N/L	Per discharge	Composite (4)
E.coli (cfu/100 ml)	N/A	N/A	N/L	N/L	Every 8 hours, first sample within 2 hours of beginning of discharge	Grab
Total Residual Chlorine (mg/l) (5)	N/A	N/A	N/L	N/L	Every 2 hours	Grab
Nitrate(NO <sub>3</sub> )	N/A	N/A	N/L	N/L	per discharge	24-hr. Composite (4)
Total Kjeldahl Nitrogen (7)	N/A	N/A	N/L	N/L	per discharge	24-hr. Composite (4)
Nitrogen	N/A	N/A	N/L	N/L	per discharge	24-hr. Composite (4)
Phosphorus	N/A	N/A	N/L	N/L	per discharge	24-hr. Composite (4)
Carbonaceous Biological Oxygen Demand	N/A	N/A	N/L	N/L	Per Discharge	Composite (4)

- (2) The Northeast Boundary Swirl Facility operates during wet weather events that produce flows which exceed the capacity of the upstream Eastside Interceptor. The facility provides treatment for up to 400 mgd of combined sewer overflow. The facility provides screening of influent combined sewage, concentration of solids in the swirl tanks, and disinfection and



dechlorination of effluent. The concentrated, solids-bearing underflow from the swirl is pumped by the Eastside Pumping Station to the Blue Plains Wastewater Treatment Plant.

- (2) N/A Not Applicable
- (3) N/L No Limit, monitoring only
- (4) Collect one grab sample every two (2) hours beginning within 2 hours of the start of the discharge, composite samples up to a maximum of 24 hours. Permittee shall analyze the composited sample. If the permittee is unable to collect the first sample within 2 hours of the start of the discharge permittee shall explain in writing why it was unable to collect the required sample. The monthly average shall be determined by dividing the daily average event or events concentration by the total number of days the event(s) occurred per month.
- (5) See Part IV.C for additional Chlorination/Dechlorination monitoring requirements.
- (6) All sampling shall commence no later than two (2) hours after a discharge has begun to occur at Outfall 019. Samples are not required for discharges lasting less than (2) two hours. The two hour delay does not apply to flow monitoring, which is required to be continuous.
- (7) The permittee may either monitor for TKN or Ammonia, whichever sampling is currently being performed.

Note: The rate of flow necessary to trigger the Northeast Boundary Swirl is 15 mgd. The purpose of this facility is to achieve maximum diversion of flow at the Structure 24 Dams on the Northeast Boundary Sewer, and to concentrate the pollutants in that flow to a smaller flow which can be handled by the available capacity of the Eastside Pump Station. The North East Boundary Swirl Facility has a total design flow rate of 400 mgd.

## **PART II. STANDARD CONDITIONS FOR NPDES PERMITS**

### **SECTION A. GENERAL CONDITIONS**

#### **1. Duty to Comply**

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and may result in an enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

#### **2. Water Quality Standards Compliance**

Consistent with the Clean Water Act, Section 301(b)(1)(C), the permittee may not discharge in excess of any limitation necessary to meet applicable water quality standards including those of the District of Columbia set forth in Chapter 21 of the District of Columbia Municipal Regulations, Chapter 11 (2006).

The limitations and conditions in this permit for the discharges from Blue Plains and the CSS are limitations that are necessary to meet the applicable water quality standards, including those of the District of Columbia referenced above.

#### **3. Penalties for Violations of Permit Conditions**

##### **a. Criminal Penalties**

i. Negligent Violations. Section 309(c) (1) of the Clean Water Act (CWA), 33 U.S.C. § 1319(c) (1), provides that any person who negligently violates any permit, condition or limitation implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the CWA, is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year or both.

ii. Knowing Violations. Section 309(c)(2) of the CWA, 33 U.S.C. § 1319(c)(2), provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the CWA is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years or both.

iii. Knowing Endangerment. Section 309(c)(3) of the CWA, 33 U.S.C. § 1319(c)(3), provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the CWA, and knows at the time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than \$250,000, or by imprisonment for not more than 15 years or both.

iv. False Statement. Section 309(c)(4) of the CWA, 33 U.S.C. § 1319(c)(4), provides that any person who knowingly makes any false material statement, representation or certification in any application, record, report, plan or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than 2 years, or by both. If a conviction is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years or by both. False statements concerning matters with the jurisdiction of a federal agency are also punishable pursuant to 18 U.S.C. § 1001 by a prison term of up to five years, a fine imposed under Title 18, Crimes and Criminal Procedure, of the United States Code, or both.

b. Civil Penalties

i. The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 318 or 405 of the Act is subject to a civil judicial penalty not to exceed \$37,500 per day for each violation.

c. Administrative Penalties.

i. The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the Act is subject to an administrative penalty as follows:

(a) Class I Penalty. Section 309(g)(2)(A) provides that a civil penalty shall not exceed \$16,000 per violation nor shall the maximum amount exceed \$37,500.

(b) Class II Penalty. Section 1319(g)(2)(A) provides that a civil penalty shall not exceed \$16,000 per violation nor shall the maximum amount exceed \$177,500.

4. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

5. Permit Actions

In accordance with 40 C.F.R. § 122.62, this permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

a. Violation of any terms or conditions of this permit;

- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge;
- d. Information newly acquired by the Agency, and which was unavailable at the time of reissuance, and would have justified the application of different permit conditions at the time of issuance, including but not limited to the results of the studies, planning, or monitoring described and/or required by this permit;
- e. Facility modifications, additions, and/or expansions;
- f. Any anticipated change in the facility discharge, including any new significant industrial discharge or changes in the quantity or quality of existing industrial discharges that will result in new or increased discharges of pollutants; or
- g. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. When a permit is modified, only conditions subject to modification are reopened.

## 6. Toxic Pollutants

Notwithstanding Section A.4 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under section 307(a) of the Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the permittee so notified.

The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

## 7. Civil and Criminal Liability

Except as provided in permit conditions on "Bypassing" (Section B.2) and "Upsets" (Section B.3), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

#### 8. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

#### 9. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act.

#### 10. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

#### 11. Severability

The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

#### 12. Transfer of Permit

In the event of any change in ownership or control of facilities from which the authorized discharge emanates, the permit may be transferred to another person if:

- a. The current permittee notifies the EPA, in writing, of the proposed transfer at least 30 days in advance of the proposed transfer date;
- b. The notice includes a written agreement, between the existing and new permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
- c. The EPA does not notify the current permittee and the new permittee of intent to modify, revoke and reissue, or terminate the permit and require that a new application be submitted.

13. Construction Authorizations

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

14. Reopener Provision

This permit may be modified or revoked and reissued as provided pursuant to 40 CFR § 122.62 and § 124.5 to:

- a. include new or revised conditions developed to comply with any State or Federal law or regulation that addresses CSOs that is adopted or promulgated subsequent to the effective date of this permit. This includes, but is not limited to: Water Quality Standards and Total Maximum Daily Loads (TMDLs);
- b. to include new or revised conditions if new information, not available at the time of permit issuance, indicates that CSO controls imposed under the permit have failed to ensure the attainment of State WQS;
- c. include new or revised conditions based on new information resulting from implementation of the Long Term Control Plan (LTCP) referenced at Part III.C of this permit.
- d. include new or revised conditions based on the results of Endangered Species Act Section 7 consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service ( FWS, NMFS or collectively, the "Services").

In addition, this permit may be modified or revoked and reissued for any reason specified in 40 C.F.R. §122.62.

15. Endangered Species

The United States Fish and Wildlife Service (FWS) has indicated that there are no Federally listed threatened or endangered species subject to its jurisdiction downstream of the Blue Plains outfalls, in the vicinity of the Potomac River in the District of Columbia and Maryland. The National Marine Fisheries Service (NMFS) has indicated that the endangered shortnose sturgeon occurs in the Potomac River, including within the District of Columbia and that several species of endangered sea turtles (leather back sea turtles, loggerhead turtles, Kemp's ridley and green sea turtles), are known to be present in the Chesapeake Bay. Pursuant to Section 7 of the Endangered Species Act, EPA and NMFS have consulted on this permit and NMFS has concurred with EPA's determination that that issuance of the permit is "not likely to adversely affect" listed species under NMFS jurisdiction. Wastewater discharges, construction, or any other activity that adversely affects a federally listed endangered or threatened species are not authorized under the terms of this permit.

The permit limits and monitoring required by this permit will allow further evaluation of potential effects on the threatened and endangered species. EPA requires that the permittee submit to NMFS an annual compilation of the Discharge Monitoring Reports (DMRs), which may be used by NMFS to further assess effects on endangered or threatened species. If these data indicate it is appropriate, requirements of this NPDES permit may be modified to prevent adverse impacts on habitats or endangered and threatened species.

The set of DMRs for the calendar year are to be submitted by February 15 of the following year to:

The National Marine Fisheries Service  
Protected Resource Division  
1 Blackburn Drive  
Gloucester, MA 01930  
Attention: Danielle Palmer

DC Department of the Environment  
Fisheries and Wildlife Division  
1200 First, N.E. 5<sup>th</sup> floor  
Washington, DC 20002  
Attention: Sylvia Whitworth

## **SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS**

### **1. Proper Operation and Maintenance**

The permittee shall at all times properly operate, inspect and maintain all facilities and systems of treatment and control (and related appurtenances, including but not limited to, sewers, intercepting chambers, interceptors, combined sewer overflows, pumping stations and emergency bypasses) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation and maintenance of back-up or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit.

### **2. Bypass of Treatment Facilities**

#### **a. Definitions**

- i. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

- ii. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

b. Bypass not exceeding limitations

- i. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs c. and d. of this section.

c. Notice

- i. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- ii. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section D.6 (24-hour notice).

d. Prohibition of bypass.

- i. Bypass is prohibited and the EPA may take enforcement action against a permittee for bypass, unless:
  - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
  - (c) The permittee submitted notices as required under Paragraph 2.c of this section.
- ii. The EPA may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraphs (a), (b), and (c) of this section.



### 3. Upset Conditions

- a. Definition: "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. Effect of an upset: An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Paragraph 3.c of this section are met. Administrative determination by the Agency on upset claims of the permittee, made before commencement of an action for noncompliance, are not final administrative actions and therefore subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
  - i. An upset occurred and that the permittee can identify the cause(s) of the upset;
  - ii. The permitted facility was at the time being properly operated;
  - iii. The permittee submitted notice of the upset as required in Section D.6; and
  - iv. The permittee complied with any remedial measures required under Section A.3.
- d. Burden of proof: In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

## **SECTION C. MONITORING AND RECORDS**

### 1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points as defined at Part II, Section C.11 of this permit. Monitoring points shall not be changed without notification to and the approval of the EPA.

2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to insure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device.

3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 C.F.R. Part 136, unless other test procedures have been specified in this permit. Monitoring data required by this permit shall be summarized on an average monthly or 7 consecutive day basis or as indicated for Mercury in Part I.B. Calculations shall be based on the average daily flow.

4. Reporting of Monitoring Results

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1). DMRs shall be submitted to EPA on a monthly basis. Monitoring results obtained during the previous month shall be summarized and reported on a DMR form postmarked no later than the 28th day of the following month. Copies of DMRs signed and certified as required by Section D.10, and all other reports required by Part II, Section D, Reporting Requirements shall be submitted to the EPA and to the District of Columbia Department of the Environment (DC DOE) at the following addresses:

U.S. Environmental Protection Agency, Region III  
NPDES Discharge Monitoring Reports (3WP31)  
1650 Arch Street  
Philadelphia, Pennsylvania 19103

and

DC Department of the Environment  
Water Quality Division  
1200 1<sup>st</sup> Street  
N.E., 5<sup>th</sup> Floor,  
Washington DC 20002

In addition, in accordance with Part II.A.14 above, by February 15 of the subsequent year, all DMRs for the previous year shall be sent to the NMFS.

5. Monitoring and Analytical Equipment Maintenance

The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals frequent enough to insure accuracy of measurements and shall insure that both calibration and maintenance activities will be conducted.

6. Analytical Quality Control

An adequate analytical quality control program, including the analyses of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results, shall be maintained by the permittee or designated commercial laboratory.

7. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 C.F.R. 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR form. Such frequency shall also be indicated.

8. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. Records for sewage sludge monitoring shall be retained in accordance with Part IV, Section B of this permit. These periods may be extended by request of the EPA at any time.

9. Record Contents

Records of monitoring information shall include:

- a. The date, exact place, time and methods of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

10. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises where a regulated facility activity is located or conducted, or where records must be kept under the conditions of this permit.
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit;
- d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

**SECTION D. REPORTING REQUIREMENTS**

1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. The permittee may submit to the permitting authority requests for modification of this provision in accordance with future promulgated regulations.

2. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers

This permit is not transferable to any person except after notice to EPA as specified in Part II, Section A, Paragraph 11. EPA may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act. Any transfer must otherwise be in accordance with 40 C.F.R. §122.61.

4. Monitoring Reports

Monitoring results shall be reported at the intervals and in the form specified in Part II, Section C, Paragraph 4 (Reporting of Monitoring Results).

5. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance must include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

6. Twenty-Four Hour Reporting

The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the noncompliance. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; the steps taken or planned to reduce, eliminate, prevent recurrence of the noncompliance, and the steps taken to minimize any adverse impact to navigable waters. The following shall be included as information which must be reported within 24 hours:

- a. Any unanticipated bypass which exceeds any effluent limitation in the permit.
- b. Any upset which exceeds any effluent limitation in the permit.
- c. Violation of a maximum daily discharge limitation for any of the pollutants listed by EPA in the permit, to be reported to EPA within 24 hours.

The EPA may waive the written report on a case-by-case basis if the oral report has been received within 24 hours and the EPA determines that the noncompliance does not endanger health or the environment.

7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Section D, Paragraphs 1, 4, 5, and 6 at the time monitoring reports are submitted. The reports shall contain the information listed in Paragraph 6.

8. Duty to Provide Information

The permittee shall furnish to the EPA, within a reasonable time, any information which the EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the EPA, upon request, copies of records required to be kept by this permit.

9. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. 40 C.F.R. §122.21(d). The application shall be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. In the event that a timely and complete reapplication has been submitted and the Director is unable, through no fault of the permittee, to issue a new permit before the expiration date of this permit, the terms and conditions of this permit are automatically continued and remain fully effective and enforceable.

10. Signatory Requirements

All applications, reports or information submitted to the Director shall be signed and certified as required by 40 C.F.R. 122.22. Knowingly making false statements, representations, or certifications is subject to penalty.

11. Availability of Reports

Unless a confidentiality claim is asserted pursuant to 40 C.F.R. Part 2, all reports submitted in accordance with the terms of this permit shall be available for public inspection at the offices of the Director. If a confidentiality claim is asserted, the report will be disclosed only in accordance with the procedures in 40 C.F.R. Part 2. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.

12. Penalties for Falsification of Reports

The Clean Water Act at Section 309 (c)(4), provides that any person who knowingly makes any false representation or certification in any record or other document filed or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, shall, upon a first conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both. For a conviction of a person for a violation committed after a first conviction of such person, punishment shall be by fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

13. Correction of Reports

If the permittee becomes aware that it submitted incorrect information in any report to the Director, it shall promptly submit the correct information.

## **SECTION E. PUBLIC ACCOUNTABILITY**

The permittee shall undertake an overall program of public accountability, including quarterly summary reports to inform all users of the sanitary system and local government officials and the general public of the extent of actual compliance with permit requirements and conditions. To facilitate public information, the permittee shall use available means such as posting quarterly summary reports on its website, inserts with water and sewer bills or other means to distribute this information to the public. In addition, the permittee shall include in this report information on the efficacy of all (on and off site) operations used in the disposal of sludge from the Blue Plains WWTP. Reports shall be provided to at least the following:

Secretary, Maryland Department of the Environment  
Executive Director, Virginia Dept. of Environmental Quality  
Director, DC Department of the Environment  
Chief of Maintenance, National Park Service  
Director, Interstate Commission of the Potomac River Basin  
Director, Metropolitan Washington Council of Governments  
Director, Water Protection Division, US EPA, Region III

### **PART III. COMBINED SEWER SYSTEM**

#### **SECTION A. GENERAL**

The permittee operates a Combined Sewer System (CSS). The CSS includes the combined sewer overflow (CSO) and other Outfalls listed below as indicated by footnotes. During the period beginning with the permit effective date and lasting until the permit expiration date, the permittee is authorized to discharge from the CSOs listed below, as specified in the following paragraphs and sections.

<b>Outfall (1)</b>	<b>Overflow Structure Location</b>	<b>Receiving Stream</b>	<b>Latitude and Longitude (approximate)</b>
003	Bolling AFB	Potomac River	N 38 49 51 W 77 01 32
004 (2)	Emergency relief for Poplar Point Sewage Pumping Station, SE	Anacostia River, East Side	N 38 51 57 W 77 00 18
005	Chicago Street and Railroad Station, SE	Anacostia River, East Side	N 38 52 08 W 76 59 36
006	Good Hope Road, West Of Nichols Ave., SE	Anacostia River, East Side	N 38 52 16 W 76 59 28
007	13 <sup>th</sup> Street and Ridge Place, SE	Anacostia River, East Side	N 38 52 16 W 76 59 19
008 (2)	Anacostia Ave. west of Blaine St. NE – relief for Anacostia Main Interceptor	Anacostia River, East Side	N 38 53 29 W 76 57 46
009	2 <sup>nd</sup> Street, 300 feet North of N Place, SE	Anacostia River, West Side	N 38 52 21 W 77 00 15
010	O Street Sewage Pumping Station, SE	Anacostia River, West Side	N 38 52 23 W 77 00 14
011	South of Main Sewage Pumping Station, SE (pumped overflow)	Anacostia River, West Side	N 38 52 22 W 77 00 17
011a	South of Main Sewage Pumping Station, SE (gravity overflow)	Anacostia River, West Side	N 38 52 22 W 77 00 17
012	North of Main Sewage Pumping Station, SE	Anacostia River, West Side	N 38 52 22 W 77 00 09



013	4 <sup>th</sup> and N Streets, SE	Anacostia River, West Side	N 38 52 22 W 77 00 09
014	6 <sup>th</sup> and M Streets, SE	Anacostia River, West Side	N 38 52 23 W 76 59 09
015	9 <sup>th</sup> and M Streets, SE	Anacostia River	N 38 52 18 W 76 59 38
016	12 <sup>th</sup> and M Streets, SE	Anacostia River, West Side	N 38 52 20 76 59 28
017	14 <sup>th</sup> and M Streets, SE	Anacostia River	N 38 52 31 W 76 59 28
018	Barney Circle and Pennsylvania Ave, SE	Anacostia River	N 38 52 39 W 76 58 57
019	NE Boundary Trunk, Vic. Of 25 <sup>th</sup> and E Sts., SE	Anacostia River, West Side	N 38 52 21 W 77 00 09
020	23 <sup>rd</sup> Street, North of Constitution Ave, NW	Potomac River, East Side	N 38 53 10 W 77 03 03
021	Northeast of Roosevelt Bridge, NW	Potomac River, East Side	N 38 53 19 W 77 03 11
022	27 <sup>th</sup> and K Streets, NW	Potomac River, East Side	N 38 53 52 W 77 03 27
023	Abandoned (Formerly 29 <sup>th</sup> And K Streets, NW)	Potomac River, East Side	Not Available
024	30 <sup>th</sup> and K Streets, NW	Potomac River, East Side	N 38 54 05 W 77 03 31
025	31 <sup>st</sup> and K Streets, NW	Potomac River, East Side	N 38 54 03 W 77 03 44
026	Wisconsin Avenue and K St., NW	Potomac River, East Side	N 38 54 06 W 77 03 47
027	Water Street West of Street, NW	Potomac River, East Side	N 38 54 13 W 77 03 57
028	36 <sup>th</sup> and M Streets, NW	Potomac River, East Side	N 38 54 13 W 77 04 18
029	Canal Road 1000 feet east of Rock Creek, NW	Potomac River, East Side	N 38 49 00 W 77 01 40
030	Abandoned (Formerly Foxhall and Canal Roads, NW)	Potomac River, East Side	Not Available
031	Pennsylvania Avenue, East Rock Creek, NW	Rock Creek, East Side	N 38 54 23 W 77 03 22
032	26 <sup>th</sup> and M Streets, NW	Rock Creek, East Side	N 38 54 22 W 77 03 17
033	N Street extended West of 25 <sup>th</sup> Street,NW	Rock Creek, East Side	N 38 54 26 W 77 03 18

034	23 <sup>rd</sup> and O Streets, SW	Rock Creek, East Side	N 38 54 36 W 77 03 05
035	22 <sup>nd</sup> Street south of Q et, NW	Rock Creek, East Side	N 38 54 33 W 77 03 00
036	22 <sup>nd</sup> Street South of Q Street, NW	Rock Creek, East Side	N 38 54 38 W 77 03 06
037	Northwest of Belmont and Rock Creek and Potomac Parkway	Rock Creek, East Side	N 38 55 02 W 77 03 04
038	North of Belmont Road, east of Kalorama Circle, NW	Rock Creek, East Side	N 38 55 08 W 77 03 05
039	Connecticut Avenue East of Creek, NW	Rock Creek, East Side	N 38 55 18 W 77 02 56
040	Biltmore Street extended east of Rock Creek, NW	Rock Creek, East Side	N 38 55 40 W 77 02 43
041	Ontario extended and Rock Creek Parkway	Rock Creek, East Side	N 38 55 40 W 77 02 43
042	Harvard Str Rock Creek Parkway, NW	Rock Creek	N 38 55 42 W 77 02 43
043	Adams Mill Road South of Irving Street, NW	Rock Creek, East Side	N 38 55 42 W 77 02 42
044	Kenyon Street and Adams Mill Road, NW	Rock Creek East Side	N 38 55 44 W 77 02 44
045	Adams Mill Road and Lamont Street, NW	Rock Creek, East Side	N 38 55 50 W 77 02 49
046	Park Road south of Piney Branch Parkway, NW	Rock Creek, East Side	N 38 56 06 W 77 02 45
047	Ingleside Terrace extended and Piney Branch Parkway	Rock Creek, East Side	N 38 56 10 W 77 02 36
048	Mt. Pleasant Street extended and Piney Branch Parkway	Rock Creek, East Side	N 38 56 15 W 77 02 23
049	Piney Branch and Lamont Street, NW	Rock Creek, East Side	N 38 56 12 W 77 02 19
050	28 <sup>th</sup> Street west of 16 <sup>th</sup> Street, NW	Rock Creek, East Side	N 38 54 14 W 77 03 23
051	Olive Street extended and Rock Creek Parkway, NW	Rock Creek, East Side	N 38 54 32 W 77 03 11
052	O Street extended and Rock Creek Parkway, NW	Rock Creek, West Side	N 38 54 31 W 77 03 16
053	O Street west of Rock Creek Parkway, NW	Rock Creek, West Side	N 38 55 18 W 77 01 40

054	West Side of Rock Creek 300 ft. south of Mass.Ave, NW	Rock Creek, West Side	N 38 54 34 W 77 03 02
055	Abandoned		
056	Normanstone Drive extended west of Rock Creek, NW	Rock Creek, West Side	N 38 55 02 W 77 03 04
057	28 <sup>th</sup> Street extended West of Rock Creek, NW	Rock Creek, West Side	N 38 55 18 W 77 03 09
058	Connecticut Avenue and Rock Creek Parkway, NW	Rock Creek, West Side	N 38 55 16 W 77 03 02
059	Luzon Valley [SEPARATED]	Rock Creek, West Side	N 38 57 54 W 77 02 13
060	P St and 26 <sup>th</sup> St, NW	Rock Creek, West Side	Not Available
061 (2)	Hayes St. & Anacostia Ave NE – Emergency relief for Upper Anacostia Sewage Pumping Station	Tributary to Anacostia – East Side	Not Available
062 (2)	Earl Place, NE - Emergency relief for Earl Place Sewage Pumping Station	Tributary to Anacostia – West Side	Not Available

- (1) All outfalls are CSO outfalls unless noted otherwise.
- (2) These outfalls are recognized in the permit as emergency relief locations; they are not CSO Outfalls. Discharges are prohibited under Part III.B.1.e(i) and are reportable under Part III.B.1.e(iii) and Part II.D.2 and 7.

## **SECTION B. TECHNOLOGY-BASED CSS REQUIREMENTS**

The permittee is required to control combined sewer overflows in accordance with the CSO Policy (April 1994). The permittee shall comply with the nine minimum technology-based conditions set forth below.

1. **Nine Minimum Controls (NMC) Program**
  - a. **Operation and Maintenance** - The permittee shall implement proper operation and maintenance programs for the sewer system and all CSO outfalls, in accordance with the program set forth below, with consideration given to the following: regular sewer inspections, sewer, catch basin and regulator cleaning; equipment and sewer collection system repair or replacement, where necessary; and disconnection of illegal connections.
    - i. **Maintain a CSS inventory.** Prepare an inspection plan and submit updated inventory information with each annual report as follows:
      - (a) **List of CSO outfalls and emergency relief locations** from Part III, Section A, COMBINED SEWER SYSTEM - GENERAL of this permit.
      - (b) **Combined Sewer Overflow Structures.** Include designation, location, description of operation, capacity and diagram or drawing of each structure. Include similar information for each inflatable dam.
      - (c) **Outfall Structures.** Include designation, location and description of each structure. Include a diagram or drawing and a picture as available and practicable. Describe outfalls characteristic at high and low tide (e.g., submerged, partially submerged, not submerged). Identify whether or not each structure is equipped with a tide gate.
      - (d) **Supervisory Control and Data Acquisition (SCADA) System.** Include a functional description, and list of information provided by the SCADA system for the CSS.
      - (e) **Rain Gages.** List location and description of rain gauges installed Within the CSS.
    - ii. **Inspect CSS control structures (regulator structures and tide gates)** at least once per month.
    - iii. **Inspect pumping stations** at least once per month.

- iv. Inspect Northeast Boundary Swirl Facility at least once per month.
  - v. Inspect inflatable dams and CSS SCADA system at least once per month.
  - vi. Develop an inspection program for the major combined sewers where each major combined sewer is inspected on a rotating schedule of sufficient frequency to maintain capacity requirements.
  - vii. Inspect outfall structures annually.
  - viii. Following rehabilitation, operate and maintain the Main, "O" Street, Potomac and Poplar Point and Eastside Pumping stations to provide firm pumping capacities of 240 MGD, 45 MGD, 460 MGD, 45 MGD and 45 MGD respectively.
- b. Use Collection System for Storage
- i. Operate and maintain inflatable dams to optimize storage in the CSS.
- c. Pretreatment Program
- i. Use pretreatment regulations to control any industrial discharges that may be identified as impacting CSOs.
  - ii. Use pretreatment regulations to require permitted significant industrial users (SIUs) discharging directly to the CSS to establish management practices to limit (e.g., use of control, detention or prohibition) batch discharges during wet weather conditions to the maximum extent feasible. Conduct an annual inspection of the above users to identify the existence of any batch discharges. Evaluate batch discharges identified to determine whether and to what extent limitations are appropriate during wet weather, taking into consideration volume, frequency, characteristics and the need to protect life and property.
- d. Maximize Flow to Blue Plains
- i. During wet weather, operate the pumping stations and collection system to deliver the maximum flow possible to Blue Plains within the constraints of the pumping stations, configuration and capacity of the collection system, and the capacity of the treatment plant. Develop a reporting system to show that operation of the pumping stations has been maximized during wet weather and that the maximum flow possible is being delivered to Blue Plains for treatment within the constraints of the pumping stations, collection system and treatment plant. Report such operations for each wet weather event.
  - ii. Maintain pumps to maximize flow to Blue Plains.

- iii. The permittee shall ensure that the collection system has the capacity to convey flows at a rate totaling at least 1076 mgd to Blue Plains for treatment.
- e. Eliminate Dry Weather Overflows (DWOs)
  - i. Dry weather overflows from CSO outfalls are prohibited. When the permittee detects a dry weather overflow, the permittee shall begin corrective action immediately. The permittee shall inspect the dry weather overflow each subsequent day until the overflow has been eliminated.
  - ii. Maintain a program to enlist public support for reporting DWOs.
  - iii. Receive reports of DWOs on a 24-hour basis. Each dry weather overflow confirmed by the Permittee shall be reported to District of Columbia Department of the Environment (DDOE) and EPA Region III within 24 hours.
- f. Control Solid and Floatable Materials in CSOs
  - i. Screen pumped overflows at the Main and O Street Pumping Stations.
  - ii. Screen flow into the Northeast Boundary Swirl Facility.
  - iii. Operate and maintain end of pipe solid and floatable BMP demonstration controls until termination of the demonstrations at locations as follows:
    - (a) End of pipe netting system at CSO Outfall 018. Bar rack at CSO Outfall 041 at Structure Number 62.
    - (b) Bar rack at CSO Outfall 040 at Structure 61.
    - (c) Inspect BMP demonstration controls at least once per month. Clean BMPs following wet weather events on a schedule that maintains capture functions.
  - iv. Clean 85 percent of the 8200 catch basins in the combined sewer area at least annually. Inspect catch basins in CSO areas tributary to the Anacostia River at least 2 times per year and clean more frequently as identified by inspections.

The Anacostia River CSO areas inspection schedule is an interim schedule until permanent solids and floatable control facilities are placed in operation as part of the Long Term Control Plan. As permanent facilities are placed in operation, in each combined sewer area, the permittee may petition EPA to reduce the cleaning frequency to once per year in that area.

- v. Operate the Anacostia River Floatable Debris Removal Program. This program comprises pick up of debris by skimmer and support boats on a regular weekly schedule, weather and river conditions permitting.
- vi. Advise the D.C. Department of Public Works (DPW) and the National Park Service (NPS) in writing at least once per year on methods and systems to maximize litter control in the CSS, targeting neighborhoods that contribute disproportionate amounts of trash to the CSS. Document these efforts in quarterly CSO reports.
- vii. Implement an ongoing, appropriate bi-lingual (English and Spanish) public education program aimed at reducing litter in the CSO sewershed, including public service announcements, public school presentations and stenciling programs.
- viii. Prepare lesson plan materials to educate school children on the ways and means for citizens to assist in reducing the amount of solid and floatable materials in CSOs. Make the materials available to D.C. Public elementary schools for their use. Offer to make presentations to schools on the lesson plan and the CSO program at up to 6 occasions per year.

g. Pollution Prevention

- i. Conduct regular public education programs to advise citizens of proper disposal of substances (e.g., household wastes, plastics, paper products, oils, leaves and the use of fertilizer).
- ii. Conduct tours of Blue Plains to educate public on aspects of CSO control that can be enhanced with public assistance.
- iii. Use the pretreatment program to encourage industrial waste reduction through recycling and improved housekeeping.
- iv. Notify responsible agencies to enforce regulations that prohibit entrance into the CSS of any substance that may impair or damage the function and performance of collection and treatment systems.
- v. Coordinate where feasible and practicable WASA's pollution prevention programs with those of D.C. government agencies such as the following partial list of pollutant prevention programs conducted by District of Columbia government agencies:
  - (a) Department of Public Works Programs
    - (i) Curbside recycling
    - (ii) Leaf pickup

- (iii) Public trash receptacles
- (iv) Household hazardous waste collection
- (v) Residential bulk refuse collection and self-Service disposal
- (vi) Campaign against rats
- (vii) Support of community cleanup programs ("Helping Hand")
- (viii) Enforcement of illegal dumping operations
- (ix) Street cleaning and sweeping
- (x) Public education for DPW Solid Waste Education And Enforcement Program ("SWEEP")

(b) Department of Environment Programs

- (i) Public education and assistance
- (ii) Enforcement of storm water and erosion/sedimentation control regulations

h. Public Notification

i. Operate a light on the Anacostia River and a light on the Potomac River to notify river users of CSO events. Lights will be operated by a signal from a representative CSO outfall on each river. A light (color A) will be illuminated during a CSO occurrence and a second light (color B) will be illuminated for 24 hours after a CSO has stopped.

ii. Maintain a website with information on: (a) nature of CSO discharges; (b) locations of CSOs; (c) potential health threats of CSOs; (d) record of CSO events by outfall with number, average duration and volume for the prior three month calendar quarter based on modeled results; (e) description of light system on the Anacostia River and Potomac River that advises river users of times that CSOs are actually occurring; and (f) nature and duration of conditions potentially harmful to users of receiving waters during and after a CSO event.

iii. Prepare and distribute semi-annually in sewer bills an informational pamphlet with information similar to that listed under h.ii above.

iv. Distribute a pamphlet semi-annually to locations (e.g., boathouses, marinas, water sports shops) frequented by receiving water users. The pamphlet shall include information similar to that listed under h.i above. Distribution will be to the extent permitted by owners of the locations.

v. Prepare and maintain an information bulletin to distribute to callers requesting information on the CSS and CSOs.

vi. Include updates and status of CSS and CSO plans and programs in information distributed under h. i, ii, iii, and iv above.



- vii. Maintain warning signs at all CSOs.
- i. Monitoring
  - i. Operate and maintain the SCADA system that monitors activation of selected CSO outfalls.
  - ii. Monitor and record the condition of the bar racks at the Main and O Street Pumping Stations storm,/CSO pumps to assess their ability to trap floatables.
  - iii. Monitor and record debris removed by the Anacostia River Floatable Debris Removal Program.
  - iv. Monitor and record flow, screenings removal and disinfection and dechlorination at the Northeast Boundary (NEB) Swirl Facility.
  - v. Monitor and record demonstration floatables removal; (a) at the end of pipe netting system at Outfall 018; (b) at bar rack at Outfall 041; and c) at the bar rack at Outfall 040 for the duration of the demonstration project.
  - vi. Monitor and record rainfall at a minimum of four 4) locations in the CSS. Locate rain gages at sites which are different from those used in the development of the LTCP. Report the number, volume and average duration of overflows for each active CSO outfall. The information shall be prepared using the latest model of the CSS, based on the measured storm event data and the operation of the inflatable dams for the previous calendar year.

### **SECTION C. Water Quality Based Combined Sewer System (CSS) Requirements**

1. The Long Term Control Plan (LTCP) for the District of Columbia CSS including supplements thereto, provides for the control of CSO discharges to comply with the District of Columbia water quality standards in the Anacostia River, Rock Creek and its Piney Branch tributary and the Potomac River.
2. The permittee shall implement and effectively operate and maintain the CSO controls identified in the LTCP and any supplements thereto.
3. The LTCP for the District of Columbia CSS provides for the control of CSO discharges to the Anacostia River, Rock Creek and its Piney Branch tributary and the Potomac River. The LTCP facilities for controlling discharges to the above-named receiving waters include, among other things, diversion structures, a system of underground storage tunnels, pumping stations and outfall and overflow structures. The facilities shall, within the capacities provided, divert combined sewer flows to the storage tunnels, store combined sewer flow and convey stored combined sewer flow to Blue Plains for treatment.

4. The permittee shall effectively operate and maintain the LTCP CSO control facilities in accordance with the limitations and conditions set forth below.
5. Discharges from CSO Outfalls and tunnel overflow structures are prohibited except during wet weather events when one or more of the following conditions exist:
  - a. The associated tunnels serving individual CSO outfalls and tunnel overflow structures are filled to their design capacities.
  - b. Combined sewer flow is being transferred from individual CSO outfalls to the associated storage tunnel or diversion sewer at not less than minimum diversion rates listed below.
6. Solids and floatables capture shall be provided for all overflows prior to discharge to receiving waters.
7. All combined sewer flow stored in the Anacostia River, Northeast Boundary, Piney Branch and the Potomac River storage tunnels shall be emptied in such a manner as to maximize treatment of the stored flows through complete treatment at Blue Plains and to optimize conditions for maintaining the availability of storage volume in the tunnels system.
8. Storage tunnels shall have minimum design capacities as follows:
  - a. Anacostia River and Northeast Boundary Tunnels - 157 million gallons
  - b. Piney Branch Tunnel - 9.5 million gallons
  - c. Potomac River Tunnel - 58 million gallons
9. Minimum diversion capacities from CSO outfalls to storage tunnels or interceptors and monitoring of diversions shall be as follows:

a. Anacostia CSO Control Systems

CSO Outfall	Drainage Area	Minimum Diversion Capacity For CSO Control (mgd)	Diversion to Tunnel or Diversion Sewer	Monitoring
005	Fort Stanton	22	Tunnel	(2)
006	Fort Stanton	to be separated	n/a	n/a

007	Fort Stanton	44	Tunnel	(3)
009	Canal Street	21	Tunnel	(2)
010and011	B St/NJ Ave	180	Tunnel	(3)
012	Tiber Creek	221	Tunnel	(3)
013	Canal Street Sewer	17	Tunnel	(2)
014	Navy Yard/M St.; 6 <sup>th</sup> St-7th St	61	Tunnel	(2)
015	Navy Yard/M St.; 9 <sup>th</sup> St	22	Tunnel	(2)
016 <sup>(1)</sup>	Navy Yard/M St.; 12 <sup>th</sup> St - 9 <sup>th</sup> St.	86	Tunnel	(2)
017 <sup>(1)</sup>	Navy Yard/M St.; 14 <sup>th</sup> St to Penn Ave	65	Tunnel	(2)
018	Barney Circle	57	Tunnel	(2)
019	Northeast Boundary	1,160	Tunnel	(3)

b. Potomac CSO Control Systems

CSO Outfall	Drainage Area	Minimum Diversion Capacity for CSO Control (mgd)	Diversion To Tunnel or Diversion Sewer	Monitoring
020	Easby Point	297	Tunnel	(3)
021	Slash Run	530	Tunnel	(3)
022	I St - 22 <sup>nd</sup> St. NW	333	Tunnel	(3)
024 <sup>(1)</sup>	West of Rock Creek Diversion Sewer	66	Tunnel	(2)

025 <sup>(1)</sup>	31 <sup>st</sup> & K St NW	3	Tunnel	(2)
026 <sup>(1)</sup>	Water St Dist (WRC)	0	Tunnel	(2)
027 <sup>(1)</sup>	Georgetown	92	Tunnel	(2)
028 <sup>(1)</sup>	37 <sup>th</sup> St. Georgetown	9	Tunnel	(2)
029	College Pond	133	Tunnel	(3)

c. Rock Creek CSO Control Systems

<b>CSO Outfall</b>	<b>Drainage Area</b>	<b>Minimum Diversion Capacity for CSO Control (mgd)</b>	<b>Diversion to Tunnel or Diversion Sewer</b>	<b>Monitoring</b>
031	Penn Ave	to be separated	n/a	n/a
032	26 <sup>th</sup> St - M St	6	Interceptor	(4)
033	N St - 25 <sup>th</sup>	5	Interceptor	(3)
034	Slash Run	6	Interceptor	(4)
035	NW Boundary	290	Interceptor	(4)
036	Mass Ave & 24 <sup>th</sup> St	29	Interceptor	(3)
037	Kalamora Circle West	to be separated	n/a	n/a
038	Kalamora Circle East	5	Interceptor	(4)
039	Belmont Rd	28	Interceptor	(4)
040	Biltmore Rd	12	interceptor	(4)
041	Ontario Rd	14	Interceptor	(4)
042	Quarry Rd	19	Interceptor	(4)
043	Irving St	35	Interceptor	(4)
044	Kenyon St	4	interceptor	(4)
045	Lamont St	8	Interceptor	(4)
046	Park Rd	9	Interceptor	(4)
047	Ingleside Terr	10	Interceptor	(3)
048	Oak St/Mt Pleasant	11	Interceptor	(4)

049	Piney Branch	468	Tunnel	(3)
050	M St - 27 <sup>th</sup> St	21	interceptor	(4)
051	Olive-29th St	4	Interceptor	(4)
052	O St - 31 <sup>st</sup> St	56	Interceptor	(4)
053	O St	to be separated	n/a	n/a
054	West Rock Cr Diversion Sewer	(5)	Interceptor	(4)
055	Abandoned	n/a	n/a	n/a
056	Normanstone Dr	(5)	Interceptor	(4)
057	Cleveland - 28 <sup>th</sup> St & Conn Ave	33	Interceptor	(3)
058	Conn Ave	to be separated	n/a	n/a
059	16 <sup>th</sup> and Rittenhouse Sts, NW	Separated	n/a	(4)

- (1) These outfalls have been consolidated. Diversion capacity listed is that required for CSO control.
- (2) Diversion capacity validated by construction performance test, no additional monitoring required.
- (3) Continuous flow measurement of diversion and outfall. Provision for temporary sampling on diversion and outfalls.
- (4) Diversion capacities from the referenced outfalls have been estimated based on computer modeling.
- (5) These CSOs are emergency reliefs for the West Rock Creek Diversion sewer. There is no tributary drainage area, and flow diversion does not occur at these CSOs. The performance of these CSOs will be validated by computer modeling, no additional monitoring required.

10. With each DMR, report operations of the monitored CSO control facilities by systems as follows:

- a. Volume into and out of storage tunnels;
- b. Diversion rates into storage tunnels;
- c. Discharge rates from outfalls;
- d. Start and end time of wet weather event;
- e. Time when storage tunnel became filled to minimum required capacity;

- f. All discharges from outfalls occurring prior to storage tunnel being filled to minimum required capacity and at less than minimum required diversion rates;
- g. Volume of overflows from outfalls;
- h. Results of any overflow or diversion sampling.

#### **SECTION D. POST CONSTRUCTION MONITORING**

The permittee shall implement a phased post-construction monitoring program to obtain information on rainfall, the volume and character of overflows and receiving waters characteristics. The monitoring phases shall be as follows:

<b>Phase</b>	<b>Post-Construction Condition</b>
1	Following the placement in operation of the inflatable dams and pumping stations rehabilitation.
2	Following the placement in operation of the Anacostia, Rock Creek and Potomac storage tunnels, respectively, As each tunnel is placed in operation.
3	Following the placement in operation of the complete CSO tunnels storage system

1. Phase I monitoring shall be in accordance with the following:

##### **CSO Systems**

<b>Monitoring Type</b>	<b>Anacostia River</b>	<b>Potomac River</b>	<b>Frequency (3)</b>
Rainfall Monitoring (1)	1 gauge in Northeast Boundary  1 gauge in Tiber Creek	1 gauge in Slash Run	Continuous
CSO Overflow (flow and volume) (1)	Northeast Boundary CSO 019  B ST/NJ Ave pumped overflow CSO 010	Potomac Pumping Station CSO 021 College Pond CSO 024	Continuous
CSO Overflow Sampling (2)	1 sampling station at Northeast Boundary	n/a	4 storms minimum approximately 1 hr sample interval for each storm.
Receiving Water Monitoring - Dissolved Oxygen (4)	Continuous DO Monitors	Continuous DO Monitors	approximately 30 minute intervals

Receiving Water Monitoring - Bacteria, Field Parameters(2)(4)	Bacteria Samples	Bacteria Samples	4 storms minimum
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- (1) Temporary gauges, meters and samplers to be installed.
- (2) Samples shall be analyzed for fecal coliform, E.coli, CBOD5 and TSS.
- (3) Monitoring shall be conducted for a continuous period of 12 months.
- (4) The permittee is responsible for submitting all data, however, it is acceptable to use data developed by other sources.

2. Phase 2 monitoring shall be in accordance with the following:

#### CSO Systems

Monitoring Type	Anacostia	Potomac	Rock Creek	Frequency
Rainfall Monitoring (1)	1 gauge in Northeast Boundary  1 gauge in Tiber Creek	1 gauge in Slash Run  1 gauge in College Pond	1 gauge in Piney Branch	Continuous
CSO Overflow Monitoring and Diversion to Storage Monitoring (2)	Northeast Boundary CSO 019  Fort Stanton CSO 007  B ST/NJ Ave Pumped Overflow CSO 010	Potomac Pumping Station CSO 021 College Pond CSO 029	Piney Branch CSO 049	Continuous
Tunnel Storage Level Monitoring (2)	1 sensor in Tunnel	1 sensor in tunnel	1 sensor in tunnel	Continuous
CSO Overflow Sampling (2) (3)	Sampling stations at Northeast Boundary CSO 019 and CSO 10	Sampling stations at CSO 020 and CSO 021	1 sampling station at CSO 049	4 storms minimum approx. 1 hour sample interval for each storm
Receiving Water Monitoring - Dissolved Oxygen (5)	Continuous DO monitors (5)	Continuous DO monitors (5)	n/a	approx. 30 minute intervals (5)

Receiving Water Monitoring - Bacteria, Field Parameters (3)	Use data from existing monitors and establish at least 6 other locations	Use data from existing monitors and establish at least 3 other locations	Use data from existing monitors and establish at least 7 other locations	once per week for bacteria and once per quarter for all other substances
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- (1) Temporary gauges to be installed.
- (2) Shall use facilities and equipment installed as part of CSO control systems.
- (3) Sampling shall be analyzed for fecal coliform, E.coli, mercury, arsenic, cadmium, total chromium, copper, lead, nickel, selenium, silver, zinc, chromium VI, hardness, cyanide, pesticides, PCBs, volatiles and semivolatiles, DO, ammonia as N, TKN, total phosphorus, and ortho-phosphorus. Metals shall be analyzed as dissolved and total recoverable.
- (4) Monitoring shall be conducted for a continuous period of 12 months, in each CSO system after appropriate facilities are placed in operation.
- (5) Permittee is responsible for submitting all data, however, it is acceptable to submit data provided by other sources.

3. Phase 3 monitoring shall be in accordance with the following:

CSO Systems

Monitoring Type	Anacostia River	Potomac River	Rock Creek	Frequency (4)
Rainfall Monitoring (1)	1 gauge in Northwest Boundary 1 gauge in Tiber Creek	1 gauge in Slash Run  1 gauge in College Pond	1 gauge in Piney Branch	Continuous
CSO Monitoring and Diversion to Storage Monitoring (2)	Northeast Boundary CSO 019  Fort Stanton CSO 007  B St/NJ Ave Pumped Overflow CSO 010	Potomac Pumping Station CSO 021  College Pond CSO 029	Piney Branch CSO 049	Continuous
Tunnel Storage Level Monitoring (2)	1 sensor in Tunnel	1 sensor in Tunnel	1 sensor in tunnel	Continuous
CSO Overflow Sampling (2) (3)	Sampling stations at CSO 019 and CSO 010	Sampling stations at CSO 021 and 020	1 sampling station at CSO 049	4 storms maximum approx. 1 hour sample interval for each storm
Receiving water Monitoring - Dissolved Oxygen (5)	continuous DO monitors	continuous DO monitors	n/a	approx 30 minute intervals



Receiving water monitoring-bacteria, field parameters (3) (5)	establish at least 6 locations	Establish at least 6 locations	7 other locations	once per week for bacteria and once per quarter for all other parameters
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- (1) Temporary gauges will be installed.
  - (2) Shall use facilities and equipment installed as part of CSO control systems.
  - (3) Sampling shall be analyzed for fecal coliform, E.coli, CBOD5, TSS, the 126 priority pollutants, mercury, arsenic, cadmium, total chromium, copper, lead, nickel, selenium, silver, zinc, chromium VI, hardness, cyanide, pesticides, PCBs, volatiles, semi-volatiles, DO, ammonia as N, TKN, total phosphorus and ortho-phosphorus. Metals shall be analyzed as dissolved and total recoverable.
  - (4) Monitoring shall be conducted for a continuous period of 12 months.
  - (5) The permittee is responsible for submitting all monitoring data.
4. Results from the monitoring phases shall be used to assess the performance of CSO controls against predictions established as part of LTCP development and its supplements. Performance assessments shall be prepared by the permittee and submitted to EPA within 180 days of completion of a monitoring phase. In general, the assessments shall include:
- a. Comparison of monitored overflow magnitude and duration with the LTCP predictions;
  - b. Comparison of monitored water quality in receiving waters with LTCP predictions;
  - c. Comparison of monitored CSO reductions with LTCP reductions;
  - d. Comparison of performance to TMDLs and allocations established for CSOs and approved bypasses in the receiving waters; and
  - e. Overall evaluation as to whether or not CSO controls are providing degree of control predicted for LTCP conditions and whether or not modifications or additions to the LTCP are required.

#### **SECTION E. CSO STATUS REPORTS AND SCHEDULES**

1. Progress reports are to be provided to EPA for all activities scheduled or completed in accordance with the terms of this permit. Such reports shall be submitted in quarterly and annual reports which summarize actions and activities undertaken to comply with Part III, Section B.1. and Part III, Section C of this permit (Nine Minimum Controls Program and the LTCP). Reports shall be submitted to EPA and DDOE as follows:
  - a. Submit quarterly reports on the 28<sup>th</sup> day of April, the 28<sup>th</sup> day of July, the 28<sup>th</sup> day of October and the 28<sup>th</sup> day of January. Reports shall summarize information through the last day of the month prior to the month in which the report is due. The first quarterly report shall be submitted for the first full quarter following the effective date of the permit.

- b. Submit annual reports by March 31 of each year summarizing information for the previous calendar year. The first annual report shall be submitted for the first full year following the effective date of the permit.
- 2. Information submitted in reports shall, in general, be prepared in a tabular format giving dates, times and locations as applicable. The information to be reported of the Nine Minimum Controls Program shall include the following:
  - a. CSS Control Structures - Number of inspections conducted, conditions observed (e.g., function normal, blockages, malfunctions, repairs needed) and maintenance and repairs performed. For blockages observed provide: the location of blockage, date and time that the blockage was discovered, date and time blockage was corrected, and whether or not a discharge from the outfall to the receiving water was observed. If a discharge was observed, provide an estimate of discharge volume.
  - b. Pumping Stations - Number of inspections conducted, numbers of screens and pumps installed and numbers available for service; and preventative maintenance performed. For pumps found not to be available for service, permittee shall report the cause of unavailability, schedule for and status of repairs. For the Main and O Street pumping stations, report the results of visual wet weather surveys and record of overflow screenings.
  - c. Northeast Boundary Swirl Facility - Number of inspections conducted, number of screens and swirls installed and numbers available for service; and preventative maintenance performed. Report record of flow treated and screenings removed.
  - d. Inflatable Dams and SCADA System - Number of inspections conducted. Number of dams installed and number of dams operational. Occurrence of an overflow and approximate duration of overflow based on dams inflation status.
  - e. Major Combined Sewers - Upon development of inspection program. Inspections planned, inspections conducted, results of inspections and description and schedule for maintenance and repairs planned and performed.
  - f. Wet Weather Overflows - Report the modeled results of the number, volume and average duration of overflows for each active CSO outfall due to wet weather events.
  - g. Dry Weather Overflows - Are prohibited, however, in the event that they do occur, report their location, cause, date and time discovered, action taken, date and time discharge confirmed ceased and actions taken to prevent reoccurrence of the condition causing the overflow. Include an estimate of the overflow volume.

- h. Catch Basin Cleaning - Number and location of catch basins required to be cleaned plus the number and location of catch basins actually cleaned.
  - i. Anacostia River Floatable Debris Removal Program - Number of boats available for service, number of cleaning trips, record of amount and nature of material removed.
  - j. BMP Demonstration for Solid and Floatable Control - Number of inspections conducted and conditions observed, and records of material removed at CSO outfalls 018, 040 and 041.
  - k. Other - Summarize actions and activities under programs for Pollution Prevention, Public Notification and Pretreatment.
  - l. Wet Weather Flows to Blue Plains WWTP - Upon development of a reporting system, report operations for each wet weather event.
  - m. CSS Litter Control - Number of meetings or conferences with DPW and NPS. Summary of topics discussed and actions adopted.
3. Report on the following quarterly:
- a. Northeast Boundary Swirl Facility
  - b. Inflatable Dams and SCADA System
  - c. Dry Weather Overflows
  - d. CSS Control Structures
  - e. Pumping Stations
  - f. Wet Weather Flows to Blue Plains
  - g. Wet Weather Overflows
  - h. CSS Litter Control
4. Report on the following annually:
- a. CSS Inventory
  - b. Major Combined Sewers
  - c. Catch Basin Cleaning
  - d. BMP Demonstration for Solid and Floatable Control
  - e. Anacostia River Floatable Debris Removal Program
  - f. Other

## **PART IV. SPECIAL CONDITIONS**

### **SECTION A. PRETREATMENT**

#### **Pretreatment Conditions for Program Implementation**

- 1. General Requirements - The permittee shall operate and implement an industrial pretreatment program in accordance with the federal Clean Water Act and the federal General Pretreatment Regulations at 40 C.F.R. Part 403. The program shall also be

implemented in accordance with the permittee's pretreatment program and any modifications thereto submitted by the permittee and approved by the EPA.

2. Annual Report - In accordance with 40 C.F.R. § 403.12(i), the permittee shall submit an Annual Report by March 31 of each year to EPA that describes the permittee's pretreatment activities for the previous calendar year. The Annual Report shall include a description of pretreatment activities in all municipalities from which wastewater is received at the permittee's POTW. At a minimum, the Annual Report shall include the following:

- a. Industrial Listing - The Annual Report shall contain an updated industrial listing showing the name and address of all current Significant Industrial Users (SIUs) and Non-Significant Categorical Industrial Users (NSCIUs) as defined by 40 C.F.R. § 403.3 and the categorical standard, if any, applicable to each. The listing must: (1) identify any users that are subject to reduced reporting requirements under 40 C.F.R. § 403.12(e)(3); (2) identify which users are NSCIUs; (3) identify any users that have been granted a monitoring waiver in accordance with 40 C.F.R. § 403.12(e)(2) as well as the pollutants for which the waiver was granted and the date of the last POTW sampling event for each of those pollutants; and (4) identify any categorical industrial users that have been given mass-based limits in place of concentration-based categorical limits in accordance with 40 C.F.R. § 403.6(c)(5) or concentration-based limits in place of mass-based categorical limits in accordance with 40 C.F.R. § 403.6(c)(6). In addition, the report shall contain a summary of any trucked or hauled wastewater accepted into the POTW including the source of the wastewater (domestic, commercial, or industrial) and the discharge point(s) designated by the POTW for acceptance of such wastewater. For each industrial source, the report shall indicate the name and address of the industrial source, the average amount of wastewater received per discharge day, a brief description of the type of process operations conducted at the industrial facility, whether the source facility is a categorical industrial user (including NSCIUs), significant industrial user, or non-significant industrial user, and any controls imposed on the user;

- b. Control Mechanism Issuance - The Annual Report shall contain a summary of SIU control mechanism issuance, including a list of issuance and expiration dates for each SIU. For each general control mechanism issued, provide the names of all SIUs covered by the general control mechanism and an explanation of how the users meet the criteria under 40 C.F.R. § 403.8(f)(1)(iii)(A) for issuance of a general control mechanism.

- c. Sampling and Inspection - The Annual Report shall contain a summary of the number and type of inspections and samplings of SIUs by the permittee, including a list of all SIUs either not sampled or not inspected, and the reason that the sampling and/or inspection was not conducted. For any user subject to reduced reporting under 40 C.F.R. § 403.12(e)(3), the list shall include the date of the last POTW sampling and the date of the last POTW inspection of the user. In addition, the report shall include a summary of the number of self-monitoring events conducted by each SIU and the number required to be conducted, including a list of all SIUs that did not submit the required number of reports and the reason why the reports were not submitted. For NSCIUs, the report shall provide the date of the compliance certification required under 40 C.F.R. § 403.12(q);

d. **Industrial User (IU) Compliance and POTW Enforcement** - The Annual Report shall contain a summary of the number and type of violations of pretreatment standards and requirements, including local limits, and the actions taken by the permittee to obtain compliance, including compliance schedules, penalty assessments, and actions for injunctive relief. The report shall state whether each SIU was in significant noncompliance, as that term is defined in 40 C.F.R. § 403.8(f)(2)(viii), including the parameter(s) in violation, the period of violation, the actions taken by the POTW in response to the violations, and the compliance status at the end of the reporting period. A copy of the publication of users meeting the significant noncompliance criteria shall be included. In addition, the report shall provide a list of users previously designated as NSCIUs that have violated (to any extent) any pretreatment standard or requirement during the year and the date and description of the violation(s);

e. **Summary of POTW Operations** - The Annual Report shall contain a summary of any interference, pass-through, or permit violations by the POTW and indicate the following: (1) which (if any) NPDES violations may be attributed to industrial users; (2) which IU(s) are responsible for such violations; and (3) actions taken to address these events. The report shall also include all sampling and analysis of POTW treatment plant influent, effluent, and sludge for local limits and priority pollutants identified pursuant to section 303(d) of the Clean Water Act, 33 U.S.C. § 1313(d), and conducted during the year;

f. **Pretreatment Program Changes** - The Annual Report shall contain a summary of any changes made or proposed to the approved program during the period covered by the report and the date of submission to EPA;

g. **Signatory Requirements** - The Annual Report shall be signed by a principal executive officer, ranking elected official or other duly authorized employee in accordance with 40 C.F.R. § 403.12(m). Any such authorization must be made in writing and identify an individual or position having responsibility for the overall operation of the POTW or pretreatment program.

3. **Pretreatment Monitoring** - The permittee shall conduct monitoring at its treatment plant that, at a minimum, includes quarterly influent, effluent, and sludge analysis for all pollutants for which local limits have been established, and an annual priority pollutant scan for influent and sludge.
4. **Notification of Pass-Through or Interference** - The permittee shall notify EPA, in writing, of any instance of pass-through or interference, as defined at 40 C.F.R. § 403.3(p) and (k), respectively, known or suspected to be related to an industrial discharge from an IU into the POTW. The notification shall be attached to the Discharge Monitoring Report submitted to EPA and shall describe the incident, including the date, time, length, cause (including the responsible user if known), and the steps taken by the permittee and the IU (if identified) to address the incident. A copy of the notification shall also be sent to the EPA Pretreatment Coordinator at the address provided below.
5. **Headworks Analysis** - The permittee shall submit to EPA a reevaluation of its local limits based on a headworks analysis of its treatment plant within 1 (one) year of permit issuance. In order to ensure that the permittee's discharge complies with water quality

standards, the reevaluation of the local limits shall be conducted using, among other things, any water quality standards applicable to the pollutants included in the reevaluation unless the permit includes a limit for that pollutant. The list of pollutants to be evaluated, as well as a sampling plan for collection of necessary data, shall be submitted to EPA within 3 (three) months of permit issuance. Within 4 (four) months of acceptance of the headworks analysis by the Approval Authority, the permittee shall adopt the revised local limits and notify all contributing municipalities of the need to adopt the revised local limits.

6. Changes to Pretreatment Program - EPA or the permittee may initiate program modification at any time to reflect changing conditions at the POTW, which may include (but are not limited to) the following reasons:
  - a. The program is not implemented in accordance with 40 C.F.R. Part 403;
  - b. Problems such as interference, pass-through, or sludge contamination develop or continue;
  - c. Federal, State, or local requirements change;
  - d. Changes are needed to assure protection of waters of the United States. Program modification is necessary whenever there is a significant change in the operation of the Pretreatment Program that differs from the information in the permittee's submission, as approved under 40 C.F.R. § 403.11.
7. Procedure for Pretreatment Program Changes - Upon submittal by the permittee, and written notice of approval by EPA to the permittee of any changes to the permittee's approved pretreatment program, such changes are effective and binding upon the permittee unless the permittee objects within 30 days of receipt of the written notice of approval. Any such objection must be submitted in writing to EPA at the address shown below.
8. Correspondence - Pretreatment correspondence shall be submitted to EPA at the following address:

Pretreatment Coordinator (3WP41)  
U.S. Environmental Protection Agency  
1650 Arch Street  
Philadelphia, PA 19103-2029

## **SECTION B. STANDARD SLUDGE CONDITIONS**

1. The permittee shall comply with all existing federal and state laws and regulations that apply to sewage sludge use and disposal practices, including 40 C.F.R. 503 and 40 C.F.R. 258 which are hereby incorporated as part of the permit by reference, and the Clean Water Act (CWA) Part 405(d) technical standards.

If an applicable management or practice or numerical limitation for pollutants in sewage sludge more stringent than existing federal and state regulations is

promulgated under Part 405(d) of the CWA, this permit shall be modified to conform to the promulgated regulations.

2. The permittee shall give notice to the Director of any change(s) planned or in the permittee's sludge use or disposal practice.
3. A change in the permittee's sludge use or disposal practice is a cause for modification of the permit. It is a cause for revocation and reissuance of the permit if the permittee requests or agrees.
4. The permittee shall submit an annual sludge report containing the information required in 40 C.F.R. 503 by February 19 each year. The report shall cover the previous calendar year. The sludge report shall be submitted to"

U.S. EPA, Region III  
Water Protection Division  
Office of NPDES Permitting and Enforcement  
(3WP42)  
1650 Arch Street  
Philadelphia, PA 19103 - 2029

#### **SECTION C. CHLORINATION/DECHLORINATION**

1. The permittee shall report chlorine dosage (on a pound basis) per discharge event on Outfall 001. Dosage figures shall be submitted with the DMR for the month of the discharge event.
2. The concentration of Total Residual Chlorine (TRC) in the final effluent after dechlorination shall not exceed not-detectable. The permittee is required to achieve non-detectable for TRC as measured by 0.10 mg/l.

When the TRC concentration in the final effluent results in a detectable measurement (above 0.10 mg/l) the permittee shall take immediate steps to achieve a non-detectable concentration.

The permittee shall resample TRC within one hour after the original grab sample measurement. If this grab sample shows a non-detectable amount as measured by 0.10 mg/l or less, then the original sample shall be considered in compliance. If this grab sample shows a detectable amount, above 0.10 mg/l, then the permittee shall retest in the second hour after the original non-compliance. If this grab sample in the second hour after the original non-compliance shows a not detectable amount as measured by 0.10 mg/l or less, then the sample shall be considered in compliance, but if the grab sample is above 0.10 mg/l then it will be considered a violation and recorded on the DMR. Each subsequent hourly sample above 0.10 mg/l shall be enumerated on the DMR until the effluent returns to compliance.

Whenever there is an initial detectable TRC concentration, all subsequent sampling results shall be tabulated and reported with the DMRs and the time required to achieve the TRC of 0.10 mg/l. The analytical method used and the detection limit for each sample should be included on the data tabulation.

For purposes of reporting on the DMR form, a non-detectable result shall be reported as zero. For a violation(s) of the limit, the maximum chlorine residual for the month and the total number of excursions in that month should be recorded in the appropriate column on the DMR form. The permittee shall operate the dechlorination facilities in a manner which will ensure continuous compliance with the TRC non-detectable limit.

All analytical testing for TRC shall be in accordance with 40 C.F.R. Part 136, Amperometric Titration or DPD Ferrous Titrimetric Method.

#### **SECTION D. TOTAL NITROGEN COMPLIANCE SCHEDULE**

1. The total nitrogen (TN) effluent limit from the Blue Plains plant, for Outfall 002 shall be 4,377,580 pounds per year. Improvements to the existing nitrogen removal facilities to achieve this limit shall occur no later than the dates in the following schedule:
  - a. Award contract for Construction – December 31, 2011;
  - b. Place in operation – July 14, 2014
  - c. Begin compliance with TN effluent limit – January 1, 2015.
2. Progress Reports: Beginning six months from the effective date of this permit and every six months until January 1, 2015, the permittee shall submit reports detailing progress towards completion of each of the above requirements. In addition, no later than 14 days following each of the dates set forth above, the permittee shall notify EPA in writing of its compliance or non-compliance with these requirements.

#### **SECTION E. STORM WATER MANAGEMENT**

##### **1. Storm Water Pollution Prevention Plan**

###### **a. General**

A Storm Water Pollution Prevention Plan (SWPP) was developed for this facility in accordance with the factors outlined in 40 C.F.R.125.3 (d)(2) or (3), as appropriate. The plan identifies potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharge associated with sludge handling operations or other portions of the waste water treatment plant as appropriate.



b. Plan Review

The plan shall be retained on site at the facility. The permittee shall make plans available upon request to the EPA. The EPA may notify the permittee at the time that the plan does not meet one or more of the requirements of this Part. Such notification shall identify those provisions of the permit that are not being met by the plan, and identify which provisions of the plan require modification in order to meet the minimum requirements of this Part. Within 30 days of such notification, the permittee shall make the required changes to the plan and shall submit to EPA a written certification that the requested changes have been made.

c. Plan Modification

The permittee shall amend the plan whenever;

- i. There is a change in design, construction, operation or maintenance which has a significant effect on the potential for the discharge of pollutants to the waters of the United States; or
- ii. EPA notifies the permittee of its finding that the SWPPP is inadequate in eliminating or minimizing pollutants from identified sources, or that the SWPPP is inadequate to prevent the facility from causing, or having a reasonable potential to cause or contribute to a violation of the D.C. Water Quality Standards.

## **SECTION F. PCB MONITORING AND REDUCTION**

1. The permittee shall monitor quarterly for PCBs at Outfalls 001 and 002 during the term of this permit using composite or grab samples as specified for these outfalls at Part I of this permit. The samples for Outfall 002 shall represent 2 dry weather and 2 wet weather samples quarterly during the term of this permit. Samples from Outfall 001 shall represent 2 wet weather samples quarterly during the term of this permit. During the first year of the permit, the permittee shall also monitor plant influent during one of the corresponding wet weather and one of the corresponding dry weather sampling events.

For the purpose of obtaining samples, dry weather means no measurable rain at Ronald Reagan National Airport in the prior 72 hours and wet weather means a condition when the average daily plant influent flow is greater than 511 mgd.

Samples shall be analyzed using Method 1668B. After the permittee has collected four quarterly samples from Outfall 002 and 001, the permittee may request a waiver from EPA for the remaining samples. Documentation shall be submitted with the waiver request to demonstrate why other sampling is not necessary. If the results of the monitoring indicate actual or potential exceedance of the Waste Load Allocation, and upon notification by EPA, the permittee shall within 120 days submit to EPA for comment a work plan and schedule for

preparation and implementation of a Pollution Minimization Plan (PMP) and other submittals or analyses of PCB data. Such submittals may include an assessment of PCBs in the initial source intake water to determine the net contributions of PCBs introduced to the treatment works and an analysis of the net reductions provided by treatment.

2. The PMP developed from the work plan shall include, but not necessarily be limited to:
  - a. The name and contact information for an individual who will serve as the permittee's contact for information concerning the PMP.
  - b. A narrative discussion together with necessary supporting data, charts, maps, diagrams and similar material of the permittee's CSO service area (CSO Area) including the location of all outfalls.
  - c. A time schedule with milestone dates.
  - d. Description of all known materials, equipment, processes, soil areas or facilities within the CSO area from which PCBs are known or suspected to be released, directly or indirectly into a CSO, including a description of the entry pathway if that is known. Pollutant concentrations, if known shall be reported.
  - e. Description of all known materials, processes, soil area or facilities within the CSO Area that are known to contain PCBs, but are not known to be releasing PCBs within the District's CSO Area.
  - f. During the term of this permit, the permittee shall collect and analyze at least twelve (12) in-stream samples for PCBs. Samples shall be taken simultaneously upstream and downstream of CSO outfalls and the PMP shall include planned locations for the monitoring.
  - g. The permittee shall develop a report of all known PCB sources within the CSO system that the permittee believes or has reason to believe may require some control measure to reduce its discharge of PCBs. The permittee shall work with the Interstate Commission on the Potomac River Basin (ICPRB), and other appropriate agencies, to develop a plan of action to control the discharge of PCBs from these sources.
  - h. The permittee shall develop and implement a program to identify whether industrial users have the potential to contribute to PCBs. Because PCBs may be contributed from many industrial processes, principally through oils which are contaminated by PCBs and may be rinsed and discharged into the sewer system, the permittee shall include PCBs as a sampling requirement for facilities with known or suspected sources of

PCBs. In addition, the permittee shall conduct period reviews of its industrial database, including analytical scans of suspected sources to determine whether PCBs are being discharged in detectable concentrations.

- i. The permittee shall demonstrate its compliance with the PMP by reporting the number of known sites, the number of sites referred for action and the results of the in-stream sampling activity and any other actions taken to further the goals of the PMP. The permittee shall report on PMP implementation annually by February 15 and the report shall cover the preceding calendar year.

## **SECTION G. WHOLE EFFLUENT TOXICITY (WET) TESTING**

1. In accordance with 40 C.F.R. § 122.21(j)(5), the permittee must conduct and provide the results of WET tests for chronic toxicity for Outfall 002 and acute toxicity for Outfall 001.
2. Testing Frequency
  - a. For the duration of this permit, these results must include quarterly testing on 24-hour composite effluent samples for Outfall 002, and grab samples for Outfall 001 beginning within three months of the effective date of the permit. The permittee shall conduct the toxicity tests, using a minimum of two species, using the fish fathead minnow - *Pimephales promelas* and the invertebrate species *Ceriodaphnia dubia*. Upon the completion of the last of four quarterly tests, the permittee may petition EPA for a reduction in the frequency of this testing.
  - b. In addition, pursuant to 40 C.F.R. 122.21(5)(iv)(A), the permittee shall submit the results of four quarterly tests for Outfalls 001 and 002 for a year immediately preceding the next permit application with its application for permit reissuance.
3. Monitoring
  - a. *Outfall 001.* Species and toxicity test methods for estimating the acute toxicity of NPDES effluents are found in the fifth edition of *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (EPA/821/R-02/012, 2002; Table 1A, 40 C.F.R. Part 136). The permittee shall conduct definitive 96-hour static renewal toxicity tests using a vertebrate species, the fathead minnow - *Pimephales promelas*, and definitive 96-hour static renewal toxicity tests using the invertebrate species, *Ceriodaphnia dubia* for Outfall 001. Each test will include a control and the permitted IWC of 45% concentrations in order to quantify any measurable acute toxicity. These renewal tests will need to have sufficient volume collected by grab during the storm event to use for the start of the test, the additional test renewals and TIE, if necessary.

During the first year of the WET studies the permittee shall use the multiple species required above. For the following years the permittee may perform the study using the most sensitive species only.

- b. For *Outfall 002*. Species and toxicity test methods for estimating the chronic toxicity of NPDES effluents are found in the fourth edition of *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002; Table 1A, 40 C.F.R. Part 136)(Chronic Test Methods Manual). The permittee shall conduct static renewal toxicity tests with a vertebrate species, the fathead minnow - *Pimephales promelas*, and an invertebrate species - *Ceriodaphnia dubia* for Outfall 002.

#### 4. WET Requirements

- a. For *Outfall 001*, the acute WET requirement for this discharge is “Pass” for any one test result. For this permit, the determination of Pass or Fail from a single-effluent-concentration (paired) acute toxicity test is determined using a one-tailed hypothesis test called a “t-test”. As discussed in paragraph 7. below, a mixing zone is authorized at Outfall 001. The resulting in-stream waste concentration (IWC) for Outfall 001 is 45%. The objective of a Pass or Fail test is to determine if survival in the single treatment (45% effluent) is significantly different from survival in the control (0% effluent). Following Section 11.3 in the Acute Test Methods Manual (EPA/821/R-02, 2002), the t statistic for the single-effluent-concentration acute toxicity test shall be calculated and compared with the critical t set at the 5% level of significance. If the calculated t does not exceed the critical t, then the mean responses for the single treatment and control are declared “not statistically different” and the permittee shall report “pass” on the DMR form. If the calculated t does exceed the critical t, then the mean responses for a single treatment and control are declared “statistically different” and the permittee shall report “fail” on the DMR form. This permit requires a TIE to be conducted on the original sample if the acute WET test is reported as “fail”.
- b. There are no chronic toxicity effluent limits for Outfall 002. Quarterly monitoring of chronic toxicity shall be conducted. If four consecutive chronic tests demonstrate an IC25 greater than the IWC of 52%, calculated for outfall 002, the permittee may request that EPA re-evaluate the effects of Outfall 002’s effluent upon the aquatic community and reduce or remove the WET testing frequency for the remainder of the permit cycle. If any of the quarterly chronic tests result in an IC25 less than the IWC of 52%, the permittee shall follow the requirements in paragraph G.8.b. below.

To properly conduct chronic WET tests, the laboratory must prepare a series of effluent dilutions which are specific to the permittee’s discharge. The permittee must inform the laboratory of the proper dilution series. The dilution series must include at least one dilution below the IWC. Based upon the calculated IWC, the recommended series for the chronic tests is 100, 72, 52, 38 and 27 percent effluent.

## 5. Reporting Results

All information reported must be based on data collected through analysis conducted using 40 C.F.R. Section 136 Table 1A methods. In addition, all data must comply with QA/QC requirements of 40 C.F.R. Part 136 and other appropriate QA/QC requirements for standard methods not addressed by 40 C.F.R. Part 136.

The permittee shall notify the permitting authority and DC DOE in writing within 14 days of an exceedance of a chronic or acute WET permit trigger. This notification shall describe actions the permittee has taken or will take to investigate, identify, and correct the causes of toxicity; the status of actions required by this permit; and schedule for actions not yet completed; or reason(s) that no action has been taken.

Results for toxicity testing shall be submitted with the DMRs for the month in which the toxicity was conducted.

### Additional Reporting Requirements

The permittee shall provide the results of all WET tests conducted during the four and one-half years prior to application for a new permit.

## 7. Mixing Zones

Pursuant to the District of Columbia Water Quality Standards (WQS) (21 DCMR 1105.7), a mixing zone may be allowed for point source discharges of pollutants on a case-by-case basis where it is demonstrated that allowing a small area impact will not adversely affect the waterbody as a whole. Specific conditions apply. In accordance with the DC WQS, EPA is allowing the use of mixing zones for chronic WET testing, as long as the conditions of 21 DCMR 1105.7 are met. WASA may make a request in writing for a mixing zone for one or both outfalls. The request should demonstrate how the discharge meets the conditions of 21 DCMR 1105.5.

## 8. Accelerated Toxicity Testing and Toxicity Reduction Evaluation (TRE) Toxicity (TIE) Process

- a. For Outfall. The acute permit trigger is defined as the IWC. If an acute permit trigger is exceeded, then the permittee shall begin TIE testing using the excess of the original sample collected. This test shall begin immediately upon receipt of test results exceeding the acute WET trigger. If an acute trigger is exceeded, the permittee shall conduct two additional toxicity tests using the same species and test method as soon as additional Outfall 001 CSO releases occur. If the additional toxicity tests do not exceed the specified acute WET permit trigger, then the permittee may return to their regular testing frequency.

If a toxicant(s) is identified in the TIE process, the permittee shall develop a detailed TRE Workplan which shall include, at a minimum, the additional actions the permittee shall take to investigate, identify and correct the problem.

- b. *For Outfall 002.* The chronic permit trigger is defined as the IWC for outfall 002. If the chronic permit trigger is exceeded, then the permittee shall conduct two additional toxicity tests using the same species and test method. The tests shall begin within 14 days of receipt of test results exceeding the chronic WET trigger. If one of the additional toxicity tests exceeds a chronic WET permit trigger, then, within 30 days of the receipt of this confirmation test result, the permittee shall initiate a TRE using the U.S.*EPA Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/833/B-99/002) (1999). The TRE Workplan shall include, at a minimum, additional actions to be taken by the permittee to investigate, identify, and correct the causes of toxicity; actions the permittee will take to mitigate the impact of the discharge and prevent the recurrence of the toxicity; and a schedule to implement required remedial actions.
- c. During the pendency of the TRE/TIE process, the permittee shall continue quarterly acute and/or chronic WET testing.
- d. In the event that a toxicant is identified and a remedy can be quickly implemented (e.g., lowering concentrations of chlorine or ammonia), such remedy should be implemented as quickly as possible and prior to the development and submission of a TRE Workplan.